Answer the following questions

1) α, α dipyridyl is considered as:
a) bidentate chelating agent
b) Tridentate chelating agent
c) Redox indicator
d) Non of the above

2) Flexible tetradentate chelating agent:
ⓐ α, α dipyridyl
ⓑ porphyrin
ⓒ Trien
ⓓ EDTA
ⓔ both ⓒ & ⓓ
ⓕ Non of the above

3) Rigid tetradentate chelating agent:
ⓐ EDTA
ⓑ Trien
ⓒ ~~porphyrin~~ porphin
ⓓ Non of the above

4) it is masking agent for As & Sb:
ⓐ CN^-
ⓑ H-H-H in acidic Medium
ⓒ TEA
ⓓ BAL
ⓔ both ⓒ & ⓓ

5) Masking agents for Mercury:
ⓐ KI / NH_3
ⓑ KI
ⓒ CN
ⓓ BAL
ⓔ Non of the above & it is ------

6) KI / NH_3:
ⓐ used as Metallochromic indicator
ⓑ used as indicator in Liebig Method
ⓒ used as Titrant in iodometry
ⓓ Non of the above & it is ------

(7) it demasks the $Zn(CN)_4^{-2}$ in acidic M...

(a) $CH_3-\overset{O}{C}-H$
(b) As_2O_3
(c) DPA
(d) $H-\overset{O}{C}-H$
(e) Non of the above

(8) ______ used to detect end point in the titration of Fe^{+3} by EDTA and Not pM indicator

(a) DPA
(b) Catechol violet
(c) EBT
(d) KSCN
(e) both (b) & (c)

(9) pM indicator used at pH = 10 :

(a) DPA
(b) EBT
(c) Murexide
(d) both (b) & (c)

(10) 8-hydroxy quinoline is a bidentate Chelating agent (T/F)

(11) Mg^{+2} in EDTA Titration:

(a) its stability Constant with EDTA is small
(b) it gives good end point
(c) it can be replaced easy be ...
(d) both (a) & (b)
(e) all of the above

(12) indet of $HgCl_2$ by EDTA write, the Equations

الإحلالية

$HgCl_2 + EDTA \longrightarrow Hg\text{-}EDTA$

$Hg\text{-}EDTA + KI \longrightarrow KHgI_4 + \underline{EDTA}$

EDTA is titrated $\bar{c}$ standard Zn^{+2} or Mg^{+2}

(13) Triethanolamine is masking agent for ---

(a) Al^{+3}
(b) Fe^{+3}
(c) Sn^{+4}
(d) both (a) & (c)
(e) all of the above

F (14) ______ is selective organic precipitan[t] Ni^{+2}

(a) SCN^-
(b) Dimethyl glyoxime (DMG)
(c) oxalate
(d) NaOH

(15) interference of Cr^{+3} in EDTA can be removed by treating the solution c̄ $NaOH / H_2O_2$ (T/F)

(16) Ag^+ can be determined by direct EDTA titration (T/F)

(17) The reason for your answer in previous question is ______

(a) Ag^+ form stable complex c̄ EDTA
(b) we need addition of ~~Cr~~ $Ni(CN)_4^{-2}$ 1st
(c) Ag^+ not form complex c̄ EDTA
(d) both (a) & (c)
(e) non of the above

(18) $NH_2-CH_2-(CH_2)_4-CH_2-NH_2$ is a hexadentate chelating agent (T/F)

(19) COO^- | COO^- is tetradentate chelating agent (T/F)

This is because __it is bidentate__

~~(20) (CH_2-NH_2)~~

(20) $(CH_2-NH_2)_2$ give c̄ Ag^+ a metal chelate of 1:1 (T/F)

This is because __it's polynuclear complex formed (2:1)__

(21) Bi^{+3} is titrated c̄ EDTA in:

(a) H_2SO_4 medium
(b) HCl medium
(c) HNO_3 medium
(d) none of the above

22) Al^{+3} is determined by residual EDTA titration

23) The formation of more stable complex :
(a) Radius of metal should be large
(b) Radius of ~~M~~ Ligand should be small
(c) ↑ charge on metal → ↓ stability of complex
(d) both (a) & (c)   (e) Non of the above.

24) The stability formation constant of a complex is determined by :
(a) Kf   (b) Log Kf   (c) pKf   (d) all of the above

25) The indicator used in Liebig's method in cyanometric titration is ----.
a) KI / NH_3 (b) SCN^-
c) EBT   d) Catechol violet
e) Non of the above.

26) EDTA make 5, 6 rinsed complex (T / F)

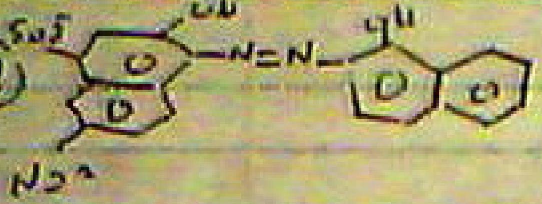
27) Titration of Cu^{+2} vs NH_3 is more feasible (صح) than titration of Cu^{+2} vs Trien (T / F)

28) Ca^{+2} is determined in EDTA titration by :
a) pH = 10   b) acidic pH (1-3)
c) 4-5 pH   d) Non.

29) The achieved pH you have choosed in previous question is obtained by ----.
a) CH_3COOH / CH_3COONa b) Hexamine
c) NaOH   d) NH_3 / NH_4Cl

30) EDTA form 1:1 chelate c̄ metal ion (T / F)
31) Murexide is pH indicator especially for Ca^{+2} (T / F)

4

32)  it is ...

a) PH indicator
b) Redox indicator
c) acid_base indicator
d) Non of the above lit...

33) The previous structure should not be used with
a) Mg
b) Cd
c) Zn
d) Fe
e) Co
F) both (b) & (c)

34) PAS & PAN is ...
a) Metalochromic indicator
b) Redox indicator
c) acid_base indicator
d) Non of the above

35) alkalimetric Titration of EDTA we use ——
a) EBT indicator
b) Catechol violet
c) xylenol orange (X-O)
d) Methyl orange.

36) Redox indicator used in det of Fe^{+3} by EDTA ..
a) DPA
b) DPB
c) Fe... phenanthroline
d) Variamine blue B.

37) For detection of Ca^{+2} in presence of Mg^{+2} we use —
a) NH_3 / NH_4
b) NaOH (pH = 12)
c) Hexamine
d) Non of the above.

38) which of the following Can be titrated ē EDTA —
a) Ag
b) Co^{+2}
c) Na^+
d) neither one
e) either one

39) DPA is .... — indicator
a) Redox
b) PH
c) acid _base.
d) Non.

(40) its ---- is a salt whose cation increase the
ox pot (oxidation potential) of Ferricyanide / ferro
redox system
a) $MnSO_4$ b) $MgSO_4$
c) $ZnSO_4$ d) Non

(41) its salt lower the OX pot of Fe^{+3}/Fe^{+2} system
a) $ZnSO_4$ b) KF
c) KSCN d) $K_2Cr_2O_7$

(42) a) $MnSO_4$ b) KI_3
c) Na_2SO_3 d) $Na_2S_2O_3$

Match

(4.2) its solution is titrant in iodimetry
(4.3) its solution is backtitrant in iodometry
(4.4) it is a component of ZRR.

(4.5) ---- used to remove HI in the iodimetric
titration of Na_3AsO_3.
a) NaOH b) Na_2CO_3
c) $Na_2S_2O_3$ d) $Na_2B_4O_7$

(4.6) in its solution iodine undergoes auto Redox
titration --
a) $ZnSO_4$ b) HNO_3
c) NaOH d) Non

(4.7) $Na_2S_2O_3$ is primary standard Reductant (T/F)

(4.8) ---- is primary standard oxidant
a) $KMnO_4$ b) $K_2Cr_2O_7$
c) $Na_2S_2O_3$ d) all of the above

(49) ___ is cerimetric oxidation product glycerol

a) CH_3-COOH
b) $H-\overset{O}{\overset{\|}{C}}-OH$
c) $H-\overset{O}{\overset{\|}{C}}-H$
d) CO_2

(50) To acidify Medium of $KMnO_4$ we use ___

a) HCl
b) HNO_3
c) H_2SO_4
d) all of the above.

(51) ~~KMn~~ $KMnO_4$ is Reduced to Mn^{+2} in acid medium (T / F)

(52) according to Condition of Reaction $KMnO_4$ Can accept $\underline{\underline{2}}$ or 3, 4 or 5 electrons (T / F)

(53) according to Condition of Reaction $KMnO_4$ Can accept:

a) 3 electron
b) 5 electrons
c) 4 electrons
d) one electrone
e) all of the above

(54) $FeCl_2$ or $FeSO_4$ Can be determined by direct titration with $KMnO_4$ in H_2SO_4 (T / F)

صح (55) The conversion of K_2CrO_4 to $K_2Cr_2O_7$ involves Redux reaction (T / F)

احسب الـ oxidation no للـ
Cr لكلا ديكرومات وكرومات سوف تجد
انه ثابت في كلاهما (+6) اي لم يحدث تغير في Valency
فلا يعتبر Redux.

(56) in the assay of Fe^{+2} by $K_2Cr_2O_7$ / H_2SO_4, using DPA, H_3PO_4 should be added (T / F)

(57) ZR reagent consist of:
(a) $MgSO_4$, H_2SO_4, H_3PO_4
(b) $MnSO_4$, H_2SO_4, H_3PO_4
(c) $MnSO_4$, HNO_3, $ZnCl_2$
d) Non of the above list is ----

(58) The potential of single electrode is Temperature independent (T/F)

(59) To measure the potential of Ce^{+4}/Ce^{+3} redox couple, Pt electrode is used (T/F)

(a) SO_2 (b) KIO_3
(c) I_2/OH^- (d) NH_4F ~~(e)~~

Match
(60) Titrant of Andrews Method
(61) used for determination of aldehyde (R-$\overset{O}{C}$-H)
(62) Component of K-F reagent (Karl Fischer)
(63) lower ox pot of Fe^{+3}/Fe^{+2} system

(64) 1-10 phenanthroline
a) gives c ferrous Redox indicator
b) used for Cerium titration
c) pM indicator
d) both (a) & (b)

(65) The indicator used in Andrews Method is ..
a) starch b) I_2
c) chloroform d) both (a) & (c)

(66) Co-ordination Number is specific for —
a) Metal b) chelating agent
c) both (a) & (b) d) Neither one

(67) The half potential of $KMnO_4$ in acidic medium is lower thant basic Medium (T/F)

(68) PO_4^{-3} Can be used in Redox titration to ____

a) ↓ potential of Fe^{+3}/Fe^{+2} by Complex ē Fe^{+2}

b) ↑ pot. of Fe^{+3}/Fe^{+2} by pptn of Fe^{+2}

c) ↓ potential of Fe^{+3}/Fe^{+2} by complex ē Fe^{+3}

d) ~~both (a&b)~~ Non of the above

(69) addition of $ZnSO_4$ to Ferricyanide / Ferrocyanide system will allow the Fe^{+2} to be determined iodometry (T / F).

(70) at 50% titration of Fe^{+2} by Ce^{+4}, the potential of system is equal to:

a) $E_0\ Ce^{+4}/Ce^{+3}$

b) $E_0\ Fe^{+3}/Fe^{+2}$

c) $\frac{E_{0\,1} + E_{0\,2}}{2}$

d) Non of the above

(71) at 200% titration (double end point) of Fe^{+2} by Ce^{+4}, the potential of system is equal to—

a) $E_0\ Ce^{+4}/Ce^{+3}$

b) $E_0\ Fe^{+3}/Fe^{+2}$

c) $\frac{E_{0\,1} + E_{0\,2}}{2}$

d) Non.

(72) Methyl orange is ____ indicator

a) specific

b) self

c) external

d) Irreversible

(73) ____ is an example of external indicator of Redox system

a) ferrocyanide

b) Ferricyanide

c) SCN^-

d) Non.

(74) ____ is an example of Redox indicator

a) DPA

b) Methylene blue

d) all of the above

(75) Nitrite Can be determined by $KMnO_4$ directly (T/F)

(76) in det. of NO_2^- by $KMnO_4$:
a) Reverse titration is needed
b) the medium should by acidic
c) Medium is basic
d) both a & b

(77) Reduction of MnO_4^- to Mn^{+3} in acidic Medium, in the presence of ----
a) Fluoride
b) pyrophosphate
c) Barium
d) both a & b
e) all of the above

(78) $MnO_4^- + 4H^+ + 3\bar{e} \rightleftharpoons MnO_2\downarrow + 2H_2O$.
this reaction in:
a) highly acidic Medium
b) Neutral or basic Medium
c) in determination of aldhydes & poly hydroxy cpd.
d) both a & b
e) both b & c

(79) determination of Ba^{+2} by $KMnO_4^-$:
a) in alkaline Medium
b) $KMnO_4^-$ is reduced to MnO_4^{-2}
c) it is type of back titration
d) both b & c
e) all of the above

(80) oxalic acid & ferrocyanide Can be determined by ---
a) $KMnO_4$
b) ~~[illegible]~~ K_2CrO_4
c) $K_2Cr_2O_7$
d) all of the above

(81) the oxidation product of glycerol by dichro[illegible]
is
a) $H-\overset{O}{C}-H$ b) $H-\overset{O}{C}-OH$
c) CH_3COOH d) CO_2

(82) in determination of glycerol or phe by dichromate we should do back titration of xs chromate using ... ... Method
a) Iodimetry b) Iodometry
c) hypoiodite d) Non

(83) Ce^{+4} / H_2SO_4 the reaction with organic compound is very slow while the reaction of $Ce^{+4} / HClO_4$ is Rapid (T / F)

(84) The reason for your answer in privious question is due to ....
a) ClO_4^- is poor complexing agent
b) SO_4^{-2} is poor " "
c) ClO_4^- is strong complexing agent
d) SO_4^{-2} is strong " "

(85) The cerimetric titration of diacetyl cpd yeild...
a) $H-\overset{O}{C}-OH$ b) $CH_3-\overset{O}{C}-OH$
c) $CH_3-\overset{O}{C}-H$ d) $H-\overset{O}{C}-H$

(86) Det. of Na_3AsO_3 iodimetry in ....
a) acidic Medium using HNO_3
b) basic Medium using NaOH
c) basic Medium " Na_2CO_3
d) " " " $NaHCO_3$

(87) to determine Fe^{+2} iodimetry H_2SO_4 is added (T/F)

(48) To determine Cu^{+2} Iodimetry we can use
a) I^- to make CuI ppt
b) SCN$^-$ to make CuSCN ppt
c) both (a) & (b) d) Non of the above

(49) Starch is ---
a) indicator give blue colour c̄ both I_2 & I^-
b) Can be used in strong acid medium
c) need preservative agent (H_3BO_3)
d) all of the above

(50) in iodometry titration ---
a) starch is added c̄ the oxidising agent
b) starch should be added only near the EP
c) we can't use starch
d) Non of the above

(51) we can ↓ acidity of medium in Andrews method by addition of ---
a) KSCN b) KI
c) KCN d) Non of the above

(52) Lange's Modification ---
a) we can't use starch as indicator
b) KIO_3 is titrant
c) 1 - 2N HCl is needed
d) both (a) & (b) e) both (b) & (c)

(53) The oxidation product of glycerol by periodate ($H_4IO_6^-$) is ---
a) H - C(=O) - H b) H - C(=O) - OH
c) CO_2 d) Non

(94) The oxidation product of $CH_3-\underset{O}{\overset{\|}{C}}-\underset{O}{\overset{\|}{C}}-CH_3$ using $H_4IO_6^-$ is ___
a) $H-\overset{\|}{C}-$ b) CH_3COOH
c) CO_2 d) Non

(95) The oxidation product of 2ry amine by $H_4IO_6^-$ is ___
a) 2ry amine b) 1ry amine
c) 3ry amine d) Non

(96) The ratio used for indirect Bromination is,
a) 1 Br^- : 5 Bromate
b) 1 Br^- : 1 Bromate
c) 5 Br^- : 1 Bromate
d) Non of this ___

(97) ~~which~~ all of the following can be determined by quantitative Bromination except ___
a) phenol b) Salicylic acid
c) benzoic acid d) sulphanilamide
e) Mg^{+2} salt f) unsaturated fatty acid

(98) Sod thiosulphate ___
a) used in iodimetric titration
b) used in iodometric titration
c) it is std oxidising agent

(99) The oxidation product of $S_2O_3^{-2}$ by I_2 is ___
a) SO_4^{-2} b) $S_4O_6^{-2}$
c) SO_3^{-2} d) all of the above
This is because I_2 is mild oxidising agent

(100) strong oxidising agent can oxidise $S_2O_3^{-2}$ to SO_4^{-2} with loss of 6 electron (T/F)

(101) Bacterial action of $S_2O_3^{-2}$ lead to ---

a) S b) SO_4^{-2}

c) SO_3^{-2} d) all of the above

(102) air oxidation of $S_2O_3^{-2}$ lead to all the following except ---

a) SO_4^{-2} b) SO_3^{-2}

c) $S_4O_6^{-2}$ d) S

(103) $S_2O_3^{-2}$ Can be used in det of pho (T/F)

(104) pH in det of $CuSO_4$ by $S_2O_3^{-}$ is 3 (T/F)

(a) Corning 015 glass = Soda Lime electrode

(b) NAS (11-18)

(c) Assym potential

(d) Lithia - silica electrode

(e) Antimony E.

(F) pt - Electrode

(g) Ag / AgBr E

(h) Ag / Ag^+ E

(i) Junction Potential.

(J) Boundary potential

(K) NO_3 - ISE

(L) SHE

(M) F - ISE

(N) SCE.

Match.

(105) it is primary reference electrode

(106) Secondary reference electrode depends on Cl^- conc.

(107) used as inert electrode

(108) electrode of 2nd type whose potential is pH depen...

(109) An example of single crystal ~~electrode~~ ISE

(110) - - of liquid membrane electrode.

An electrode whose potential depend on Br⁻
electrode of 1st type
Used Fabricate ([illegible]) pH electrode
Used to Fabricate glass electrode for accurate
measurement of pH range 9 – 14 [illegible]

(115) The potential developed at membrane electrode due to ion exchange process

(116) It is property of GF

(117) $Fe_{(s)} | Fe^{+2}$ is electrode of 1st type (T/F)
This is because — — deformation of crystals

(118) Coulometry and Colorimetry is spectrochemical Method (T/F)

(119) Coulometry is
a) electrochemical Method
b) Magneto-chemical –
c) Thermal Method
d) all

(120) Calorimetry involves measuring of Thermal energy (T/F)

(121) polarography & polarimetry is electrochemical Method (T/F)

(122) pH-GE is....
a) electron transfer electrode
b) Membrane electrode
c) ione exchange electrode
d) both (b) & (c)

(123) pH range of quinhydrone is — —
a) 0 – 14 b) 0 – 8
c) 0 – 12 d) 0 – 11

(124) Lithia – silica glass electrode used for det. of —
a) Li^+ b) Na^+
c) H^+ ion d) all of the above

(125) potential of C.E depends on $[Cl^-]$ & Temp (T/F)

(126) Potential of CE ↑ with ↓ Temp (T/F)

(127) Ag/AgBr can be used to determine Br^- (T/F)

(128) the boundary potential of Ag/AgCl depends on $[Cl^-]$ (T/F)

(129) CO_2 – sensing probe is complete ECC (T/F)

(130) in measuring pF of F–ISE the solution should be acidic (T/F)

(131) ~~in plot~~ in Ca^{++}–ISE, the plot of electrode potential against Ca^{+2} activity has slope equal to 0.059 volt (T/F)

(132) in Nernest equation $\frac{2.3RT}{F}$ equal to 0.059 when T equal to 293°K (T/F)
— 25° + 273 → 298°K not 293.

(133) which of the following electrode of 1st type — —
a) Zn / Zn^{+2} b) Cu^{+2} / Cu°
c) $Fe(s) / Fe^{+2}$ d) Pt

(134) ŵ of the followings Membrane liquid elect

a) Ca^{++} ISE

b) K^+ - ISE

c) No_3^- ISE

d) all of the above

(135) F_ ISE has the following characters exct

a) OH^- interfere ē it

b) Single crystal electrode

c) used in acidic Medium

d) electron transfer electrode

(136) NHE :

a) Can be used routinly

b) it has shorter ~~time~~ half-life

c) Not hazordous

d) work at pH -0 -8

(137) schematic Representation of CE is

a) Cl, H^+ (XM) | H_2Cl

b) pt / Cl, H^+ (XM) | H_2Cl

c) pt / Cl , Cl^- (XM) / H_2Cl

(138) schematic representation of Ag/AgCl is :

a) pt, Ag^+ | Ag

b) Ag^+ | Ag

c) Ag , Cl^- (XM) | AgCl

d) pt/Ag, Cl^- (XM) | AgCl

(139) SCE :

a) indicator electrode

b) Reference electrode of 1st type

c) Reference electrode of 2nd type

d) its potential depends on Mercurous ion

Which of the following electrode Not with electron transfer Mechanisms

a) GE
b) Ca^{++} _ ISE
c) F^- ISE
d) both ⓐ & ⓑ
e) all of the above

~~(141) Complete the follo~~

(141) NAS (11-18) Na₂O Conc is ....

a) 18 mole %
b) 21.4 mole %
c) 17 mole %
d) 71 mole %

(142) .... used to enhance alkaline error in GE

a) Lithia silica glass
b) Soda lime electrode
c) introduction of Al_2O_3 or Boron oxide
d) Non of the above

(143) all of the following are properties of ion exchanger except,

a) High ion selectivity
b) High ion exchange capacity
c) High solubility in sample solution
d) high viscosity

(144) Ion exchanger for Ca^{++} _ ISE is....

a) valinomycin
b) Ca^{++} _ didecyl phosphate
c) Resin
d) Non

(145) Ion exchanger in K^+ _ ISE is valinomycin (T/F)

(146) Ion exchanger for NO_3^- _ ISE is Resin (T/F)

Mno

(147) silver halide electrode is _

a) electron transfer electrode
b) Membrane Non crystalline ISE
c) single crystal ISE
d) polycrystalline ISE

(148) polycrystalline Ag_2S electrode used For det. of ---

a) Ag^+ b) Sulfide c) Non

(149) crystalline Membrane electrode Contain Mixture of PbS & Ag_2S is selective For --

a) Ag^+ b) S c) Pb^{+2}

(150) in F_ISE, the single crystal is ----

lanthanum Fluoride (LaF_3) c̄ Europium II fluoride

KCl + AgCl

Valinomycin

(151) The role of Europium II Fluoride in F-ISE is ---

a) acts as indicator electrode
b) improve Conductivity
c) No role & Can be eliminated

(152) Combination electrode is by Combining GE c̄ SCE or Reference electrode (T/F)

(153) Factors affecting glass electrode Function --

a) Glass Composition
b) Hygroscopic nature
c) high resistance
d) all of the above

(154) MnO_4^- in alkal Medium give black ppt of MnO_2 (T/F)

(155) Redox titration involve the following
a) electron transfer reaction
b) oxidation Reaction
c) Reduction
d) all of the above

(156) substance is called Reductant,
a) loss electron
b) loss H_2
c) [illegible]
d) both (a) & (b)

(157) $Cr_2O_7^{-2} + 6I^- + 14H^+ \rightarrow 2Cr^{+3} + 3I_2 + 7H_2O$

the equivalent wt of cromium will equal to:
a) $\frac{1}{6}$ Molecular weight
b) $\frac{1}{5}$ Molecular weight
c) $\frac{1}{3}$ molecular weight
d) Non of the above

بحسب الـ oxidation Number بتاعت الكروم (Cr) الواحد

(158) To form balanced equation we must have:
a) Charge balance
b) mass balance
c) electronegative Centre
d) electrochemical balance
e) both (a) & (b)

(159) The electrical potential of Cu^{+2}/Cu^0 system equal to standard potential when rod of Cu is immersed in
a) 1M HCl
b) 1N $CuSO_4$
c) 1M $CuSO_4$
d) both (a) & (c)

(160) $Fe(CN)_6^{-4}$ give color with Zn^{+2} which have color of ....
a) brown ppt
b) sky blue ppt
c) blood Red
d) wine red.

(161) When $KMnO_4$ give brown or black ppt it accept ------ electron

a) 3
b) 4
c) 5
d) 6

(162) The most important requirement for redox indicator is

a) E_o (ind) − E_o (analyte) ≥ 0.15 V
b) lipid soluble
c) alcohol soluble
d) Non of the above

(163) DPA can't be used for ——

a) Fe^{+2}
b) $K_2Cr_2O_7$
c) I_2
d) AsO_4^{-3}

(164) Standardization of $KMnO_4$ is done by ——

a) oxalic acid
b) sod oxalate
c) both (a) & (b)

(165) The prussian blue ppt is from

a) $Fe[Fe(CN)_6]^{-3}$
b) $Fe[Fe(CN)_6]^{-2}$
c) FeF_6^{-3}

(166) Which of the following oxidised $Cl^- \rightarrow Cl_2$.

a) $K_2Cr_2O_7$
b) I_2
c) MnO_4
d) Non

(167) ____ is titrant of Andrews Method

a) $K_2Cr_2O_7$
b) $KBrO_3$
c) KIO_3
d) b & c are correct

(168) $NaHCO_3$ in determination of AsO_3^{-3} Iodim is used to ....
a) ↓ $[H^+]$
b) prevent shift of reac
c) Neither one
d) both (a) & (b)

(169) hypoiodite is produced in situ (fresh) because—
a) highly volatile
b) affected by atmosphere
c) adsorb Moisture
d) unstable

(170) KIO_3:
a) 1ry std
b) perform andrews reaction
c) used in strong acid medium
d) all of the above

(171) $HgIO_6^-$ (s)
a. Primary std ~~by~~
b. as result of dissolve periodic in water
c. selectivity reaction of organic Cpd
d. all of the above

(172) Br_2 is used to determine phenol in ..
a) acidic Medium
b) basic
c) Neutral

(173) Mixture of $NaIO_4$ & I_2 used for det. of —
~~(a) Strong acid medium~~ ~~b)~~
(a) Carboxylic acid
b) glycerol
c) glucose
d) all of the above

(174) DMG is .... chelating agent
a) bidentate
b) Tridentate
c) Tetradentate
d) Non

(175) Reduction of ions to Metal is ionic pressure (T/F)

(176) DPA sulfonic acid can be used as redox indicator in case of $K_2Cr_2O_7$ titration (T / F)

(177) Ceric amm. nitrate is 1ry std (T / F)

(178) Bi^{+3} & Mg^{+2} can be analyzed by changing the buffer (T / F)

(179) Bi^{+3} & Fe^{+3} can be analyzed by change pH (T / F)

(180) Hexamine or acetate can be used in titration of Cu^{+2}, Pb^{+2} & Bi^{+3} (T / F)

(181) To titrate K^+ by EDTA we adjust pH by.
a) NH_3/NH_4Cl b) HNO_3
c) CH_3COOH d) None of the above.

(182) Methylene blue is ——— indicator
a) Redox b) pH c) ä - base

(183) To determine glucose using I_2 / I^- we use —
a) borax b) $NaHCO_3$ c) NaOH

(184) Titrant in Iodimetry ——
a) KI_3 b) KIO_3 c) $Na_2S_2O_3$

(185) Titrant in Iodometry
a) KI_3 b) KIO_3 c) $Na_2S_2O_3$

(186) Cu^{+2} is determined by Iodimetry (T / F)

(187) Starch used as indicator in Cu^{+2}/Cu^+ system & I_3^- / $3I^-$ system (T / F)

(188) Starch in Iodimetry & iodometry is added start of titration (T/F)

(189) Iodometry can determine oxidant as $Cr_2O_7^{-2}$ (T/F).

(190) KIO_3 used to determine I^-, hydrazine & hydrazine derivatives (T/F).

(191) Color of ICl_2^- is orange. (T/F)

(192) H_3BO_3 is added to Starch as preservative (T/F)

(193) Variamine blue B, oxidised form is colorless (T/F)

(194) Copper glycerine Complex has No charge (T/F)

Answer

1. a
2. c

c

d

b

d. used as indicator in Liebig Denige's Method

d

d

b

F

e

F

d

F

F

20. F
21. c
22. T
23. e
24. b

c

T

F

F

d

T

31. T

32. a
33. F
34. a
35. d
36. d
37. b
38. b
39. a
40. c
41. b
42. b
43. d
44. a
45. d
46. c
47. T
48. b
49. b
50. c
51. T
52. F
53. e
54. F
55. F
56. T
57. b
58. F
59. T
60. b
61. c
62. a
63. d
64. d

65. c
66. a
67. F
68. c
69. T
70. b
71. a
72. d
73. b
74. d
75. F
76. d
77. d
78. c
79. e
80. a
81. d
82. b
83. T
84. a
85. b
86. d
87. T
88. d
89. c
90. b
91. c
92. e
93. a
94. b
95. b
96. c
97. c

(98) b
(99) b
(100) F / loss of 8 c
(101) d
(102) d
(103) T
(104) T

(111) a
(112) b
(113) b
(114) d
(115) J
(116) c
(117) F
(118) F
(119) a
(120) T
(121) F
(122) d
(123) b
(124) c
(125) T
(126) T
(127) T
(128) F
(129) T
(130) T

equal to 04.53

(132) F / equal to 2.98
(133) c
(134) d
(135) d
(136) b
(137) b
(138) c
(139) c
(140) c
(141) c
(142) c
(143) c
(144) b
(145) T
(146) T
(147) d
(148) b
(149) ~~b~~ c
(150) a
(151) b
(152) T
(153) d
(154) T
(155) d
(156) d
(157) c
(158) c
(159) c
(160) b
(161) a
(162) a
(163) a
(164) b
(165) b

(166) c
(167) c
(168) d
(169) d
(170) d
(171) d
(172) a
(173) c
(174) a
(175) T
(176) T
(177) T
(178) T
(179) F
(180) F
(181) d
(182) a
(183) c
(184) a
(185) c
(186) F
(187) F
(188) F
(189) T
(190) T
(191) F
(192) T
(193) F
(194) T